

**Notice of Allowability**

Application No.

09/704,769

Applicant(s)

WANN, SHUNING

Examiner

Paul Callahan

Art Unit

2137

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Interview conducted 9-1-06.
2. ☒ The allowed claim(s) is/are 7-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_ *PC*
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Emmanuel L. Moise*  
**EMMANUEL L. MOISE**  
**SUPERVISORY PATENT EXAMINER**

### **DETAILED ACTION**

1. In view of the changes made to the language of the claims, and cancellation without prejudice of certain other claims, via the Examiner's Amendment found infra and agreed to in the interview conducted with the Applicant's representatives Mr. Natu Patel, Esq., and Mr. Daniel Sherr, Esq., held on 9-1-06, PROSECUTION IS HEREBY REOPENED. An indication of allowability and reasons for allowance of the remaining claims are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

2. Claims 7-32 were pending in the instant application at the time of the previous Office Action. Via the Examiner's Amendment that was agreed upon in the interview

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conducted with the Applicants representatives on 9-1-06, claims 22-32 are cancelled without prejudice. Therefore claims 7-21 remain pending and have been examined.

### **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Natu Patel, Esq., and Mr. Daniel Sherr, Esq., on 9-1-06.

The application has been amended as follows:

IN THE CLAIMS

Claims 22-32 are now cancelled without prejudice.

Claim 7 is amended as follows:

7. A cryptographic device, comprising:

at least one data stream interceptor that distinguishes between command/control and data signal transfers;

a main controller receiving input from said at least one data stream interceptor and determining whether incoming data would be encrypted or passed through based on the received input from said at least one data stream interceptor;

at least one data generating controller adapted to perform at least one data transfer protocol with at least one data generating device on command from said main controller;

at least one data storage controller adapted to perform at least one data transfer protocol with at least one data storage device on command from said main controller;  
and

at least one cipher engine adapted to transparently encrypt at least one data stream flowing between said at least one data generating device and said at least one data storage device on command from said main controller.

Claim 11 is amended as follows:

11. A cryptographic device, comprising:

at least one data stream interceptor that distinguishes between command/control and data signal transfers;

a main controller receiving input from said at least one data stream interceptor and determining whether incoming data would be decrypted or passed through based on the received input from said at least one data stream interceptor;

at least one data generating controller adapted to perform at least one data transfer protocol with at least one data generating device on command from said main controller;

at least one data storage controller adapted to perform at least one data transfer protocol with at least one data storage device on command from said main controller;

and

at least one cipher engine adapted to transparently decrypt at least one data stream flowing between said at least one data generating device and said at least one data storage device on command from said main controller.

Claim 15 is amended as follows:

15. The A cryptographic device, comprising:

at least one data stream interceptor that distinguishes between command/control and data signal transfers;

a main controller receiving input from said at least one data stream interceptor and determining whether incoming data would be encrypted, decrypted or passed through based on the received input from said at least one data stream interceptor;

at least one data generating controller adapted to perform at least one data transfer protocol with at least one data generating device on command from said main controller;

at least one data storage controller adapted to perform at least one data transfer protocol with at least one data storage device on command from said main controller;  
and

at least one cipher engine adapted to transparently encrypt ~~and~~ or decrypt at least one data stream ~~flowing~~ between said at least one data generating device and said at least one data storage device on command from said main controller.

Claim 19 is amended as follows:

19. A cryptographic device operatively coupled between a data generating device and a data storage device for use during data transfer, said cryptographic device comprising:

a data stream interceptor that distinguishes between command/control and data signal transfers;

a main controller receiving input from said at least one data stream interceptor and determining whether incoming data would be encrypted, decrypted or passed through based on the received input from said at least one data stream interceptor;

a data generating controller adapted to perform at least one data transfer protocol with the data generating device on command from said main controller;

a data storage controller adapted to perform at least one data transfer protocol with the data storage device on command from said main controller; and

a cipher engine adapted to transparently encrypt ~~and~~ or decrypt at least one data stream flowing between the data generating device and the data storage device on command from said main controller.

Claim 20 is amended as follows:

20. A cryptographic device integrated within a data storage device for use during data transfer with a data generating device, said cryptographic device comprising:

a data stream interceptor that distinguishes between command/control and data signal transfers;

a main controller receiving input from said data stream interceptor and determining whether incoming data would be encrypted, decrypted or passed through based on the received input from said at least one data stream interceptor;

a data generating controller adapted to perform at least one data transfer protocol with the data generating device on command from said main controller;

a data storage controller adapted to perform at least one data transfer protocol with the data storage device on command from said main controller; and

a cipher engine adapted to transparently encrypt ~~and~~ or decrypt at least one data stream ~~flowing~~ between the data generating device and the data storage device on command from said main controller.

Claim 21 is amended as follows:

21. A cryptographic device integrated within a data generating device for use during data transfer with a data storage device, said cryptographic device comprising:

a data stream interceptor that distinguishes between command/control and data signal transfers;

a main controller receiving input from said data stream interceptor and determining whether incoming data would be encrypted, decrypted or passed through based on the received input from said at least one data stream interceptor;

a data generating controller adapted to perform at least one data transfer protocol with the data generating device on command from said main controller;

a data storage controller adapted to perform at least one data transfer protocol with the data storage device on command from said main controller; and

a cipher engine adapted to transparently encrypt ~~and~~ or decrypt at least one data stream ~~flowing~~ between the data generating device and the data storage device on command from said main controller.

***Allowable Subject Matter***

4. Claims 7-21 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The closest prior art in the field, Harrison et al., US 6,081,895, and Van Rumpt et al., 5,513,262, do not teach the combination of features of the claimed invention as set forth in the independent claims, particularly including the claimed arrangement of a data stream interceptor that distinguishes between command/control and data signal transfers, a main controller receiving input from said data stream interceptor and determining whether incoming data would be encrypted, decrypted or passed through based on the received input from said at least one data stream interceptor; and a cipher engine adapted to transparently encrypt or decrypt at least one data stream between a data generating device and a data storage device on command from said main controller, all in combination with the other claim limitations and in the manner of the applicant's disclosure.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

PEC

8-13-06

*Paul Callahan*